

EXHIBIT O

(<https://google.com/racialequity>)

Configure Analytics Data Collection and Usage

Google Analytics offers features which allow you to control the collection and use of Analytics data.

 iOS

 Android

Disable Analytics data collection

In some cases, you may wish to temporarily or permanently disable collection of Analytics data, such as to collect end-user consent or to fulfill legal obligations. Google Analytics offers multiple options for disabling and deactivating Analytics collection. Used together, they support many typical use cases.

Temporarily disable collection

If you wish to temporarily disable Analytics collection, such as to get end-user consent before collecting data, you can set the value of `FIREBASE_ANALYTICS_COLLECTION_ENABLED` to `NO` (Boolean) in your app's `Info.plist` file. For example, viewed in the source XML:

```
<key>FIREBASE_ANALYTICS_COLLECTION_ENABLED</key>
<false/>
```

To re-enable collection, such as after an end-user provides consent, call the

[setAnalyticsCollectionEnabled](#)

([/docs/reference/swift.firebaseio/api/reference/Classes/Analytics#setanalyticscollectionenabled_](#)) instance method of `Analytics`. For example:

[SwiftObjective-C \(#objective-c\)](#)

```
Analytics.setAnalyticsCollectionEnabled(true)
```

If you need to suspend collection again for any reason, you can call

[SwiftObjective-C](#) (#objective-c)

```
Analytics.setAnalyticsCollectionEnabled(false)
```

and collection is suspended until you re-enable it. The value set by the `setAnalyticsCollectionEnabled` method persists across app executions and overrides the value for `FIREBASE_ANALYTICS_COLLECTION_ENABLED` in your app's Info.plist file. Once you set a value for `setAnalyticsCollectionEnabled`, Analytics collection remains in that state until `setAnalyticsCollectionEnabled` is called again, even if a user closes and re-opens your app.

Permanently deactivate collection

If you need to deactivate Analytics collection permanently in a version of your app, set `FIREBASE_ANALYTICS_COLLECTION_DEACTIVATED` to YES (Boolean) in your app's Info.plist file. Setting `FIREBASE_ANALYTICS_COLLECTION_DEACTIVATED` to YES (Boolean) takes priority over any values for `FIREBASE_ANALYTICS_COLLECTION_ENABLED` in your app's Info.plist as well as any values set with `setAnalyticsCollectionEnabled`.

To re-enable collection, remove `FIREBASE_ANALYTICS_COLLECTION_DEACTIVATED` from your Info.plist. Setting `FIREBASE_ANALYTICS_COLLECTION_DEACTIVATED` to NO (Boolean) has no effect and results in the same behavior as not having `FIREBASE_ANALYTICS_COLLECTION_DEACTIVATED` set in your Info.plist file.

Disable IDFA collection

If you wish to disable collection of the IDFA (Advertising Identifier) in your iOS app, ensure that the [AdSupport framework](#) ([//developer.apple.com/documentation/adssupport](http://developer.apple.com/documentation/adssupport)) is not included in your app.

Disable IDFV collection

If you wish to disable collection of the IDFV (Identifier for Vendor) in your iOS app, set the value of `GOOGLE_ANALYTICS_IDFV_COLLECTION_ENABLED` to `NO` (Boolean) in your app's Info.plist file.

Configure the use of Analytics data

Disable personalized advertising features

If you have linked your Google Analytics project to an ads account or otherwise enabled an ads integration, or opted into [data sharing](#)

(https://support.google.com/firebase/answer/6383877?ref_topic=6317497), your Analytics data may be eligible for use in personalized advertising. This means for instance, that you may use collected events such as `first_open` to create and deploy audience lists for remarketing unless you indicate that such data is not available for personalized advertising.

To programmatically control whether a user's Analytics data should be used for personalized advertising, set the appropriate default behavior in the app's `AndroidManifest.xml` file, and then use the methods described below to override that default behavior.

To set the default personalized advertising behavior, set the value of `GOOGLE_ANALYTICS_DEFAULT_ALLOW_AD_PERSONALIZATION_SIGNALS` to `NO` (Boolean) in your app's Info.plist file.

You can also control whether data collected from end users may be used for ads personalization via the [ads personalization setting](#)

(<https://support.google.com/analytics/answer/9626162>), found in Google Analytics' Property settings.

Re-enable personalized advertising features

To re-enable personalized advertising features for a user at run-time, such as after an end-user provides consent, use the [setUserProperty](#)

([/docs/reference/swift.firebaseio/api/reference/Classes/Analytics#setuserproperty\(_:forname:\)](https://docs/reference/swift.firebaseio/api/reference/Classes/Analytics#setuserproperty(_:forname:))) method as shown below:

[SwiftObjective-C](#) (#objective-c)

```
Analytics.setUserProperty("true", forName: AnalyticsUserPropertyAllowAdPersonalization)
```

If you have chosen to temporarily disable analytics collection (for example, until an end-user provides consent), and you want to control personalized advertising features upon re-enabling analytics collection for a user, ensure that your call to specify this setting precedes your call to re-enable analytics collection. For example:

SwiftObjective-C (#objective-c)

```
Analytics.setUserProperty(..., forName: AnalyticsUserPropertyAllowAdPersonalization)
Analytics.setAnalyticsCollectionEnabled(true)
```

Google may in certain circumstances disable personalized advertising for analytics data collected from an end user even when you have not done so, where Google has information that the respective end user is not eligible for personalized advertising (for example, [the end user on an Android device is under the applicable age per our advertising policies](#) (<https://support.google.com/adspolicy/answer/143465>)).

Confirming your settings

When ad personalization signals have been disabled for a user via one of the mechanisms defined above, subsequent event bundles logged from that user's device will contain a user property named "non_personalized_ads" with a value of 1 to indicate that events in that bundle are not available for personalized advertising. Disabling personalized advertising does not affect the use of the data for measurement purposes, including reporting and attribution.

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